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Virginia Port Authority
600 World Trade Center
Norfolk, Virginia 23510-1679
Telephone (757) 683-8000
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Jerry A. Bridges
Executive Director

January 31, 2008

Matthew O. Tucker, Director
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
Richmond, VA 23219

RE: Rail Enhancement Funding Application
Norfolk International Terminals Central Rail Yard Expansion

Dear Matt,

Please accept the enclosed Rail Enhancement Funding application package submitted on behalf of the Virginia Port Authority (VPA). This application is seeking funding for engineering design and construction services for the Norfolk International Terminals (NIT) Central Rail Yard Expansion.

The project is a two-phase, \$40 million rail yard expansion project to be completed over a four year period. The project will expand the Terminal's rail yard to a total capacity of 37,000 track feet through construction of an additional 24,000 feet of railroad track, ties and ballast, several switches, heavy-duty pavement in the rail yard area, container handling areas, and associated civil site utility and electrical infrastructure.

These improvements will enable the NIT to increase the annual volume of containers moved by rail from 250,000 TEUs to 500,000 TEUs. This will facilitate the movement of larger volumes of cargo by rail instead of trucks, thus decreasing congestion on local and state highways. The project will also decrease train at-grade rail crossings at Hampton/ Terminal Blvd, increase "within fenceline" security of containers, decrease noise levels for local area residents (Figure 2), and increase the Port's competitiveness while supporting several VTrans2025 and Virginia State Rail Plan goals.

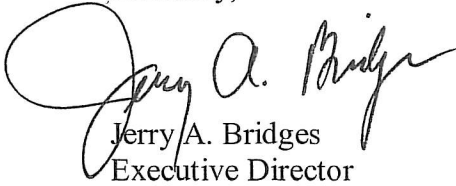
VPA, through revenue generated from Virginia International Terminals (VIT) terminal operations (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia), will provide a 63.4% match totaling \$25.4 million to fund Phase 1 design and construction, as well as equipment lease and/or acquisition. Phase 1 construction is anticipated to be complete by December 2008. The requested Rail Enhancement Funds amount to 36.6% or \$14.7 million, and are for Phase 2 design and construction. We plan to award the Phase 2 design in December 2008, and have construction completed by October 2010.

January 31, 2008

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Please let us know if any additional information is needed, or if a briefing would facilitate a better understanding of the NIT Central Rail Yard Expansion project, and the importance of this Grant application to its ultimate success.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerry A. Bridges". The signature is fluid and cursive, with a large initial "J" and "B".

Jerry A. Bridges
Executive Director

Enclosures

**DRPT Rail Enhancement Fund
Project Application Form**

Applicant:

Virginia Port Authority
600 World Trade Center
Norfolk, VA 23510

Contact Information:

Responsible Person/Title: Jeff Florin/Chief Engineer

Telephone: 757-683-2150; Fax: 757-683-2151; Email: jflorin@portofvirginia.com

Project Manager/Title: Kevin Abt/Deputy Chief Engineer

Telephone: 757-683-2139; Fax: 757-683-2151; Email: kabt@portofvirginia.com

Project Title: Norfolk International Terminals Central Rail Yard Expansion

Project Location:

Norfolk International Terminals
7737 Hampton Blvd.
Norfolk, VA 23505

Project Description/Objective:

Over the past 10 years, the total volume of container traffic in the Port of Virginia marine terminals has increased at an annual rate of 8%. In CY 2007, more than 2.1 million twenty-foot equivalent units (TEUs) were handled by the Port. With the scheduled opening of the Heartland Corridor in early 2010, the recent clearance of the CSX double stack line to Atlanta, and the planned addition of the Third Lock in the Panama Canal by 2014, this trend is expected to continue to grow at an annual rate of 4.3% (as discussed in Virginia State Rail Plan). To meet the increased volume of container traffic, the Port has developed a multi-faceted strategy to increase the capacity and efficiency of its terminals. This includes replacing obsolete and aged infrastructure through a series of projects that will increase the number of ship berths, expand the container yards, and increase rail capacity.

The Port of Virginia moves a higher percentage of containers by rail than any other east coast port. Rail volume in 2007 increased 20% and remains the fastest growing sector of the Port's growth. As the only Port terminal with "on-dock" rail service, the Norfolk International Terminals (NIT) handle the vast majority of the intermodal container traffic. However, intermodal expansion is limited by the size and configuration of the existing rail yard, and has reached maximum capacity.

The **NIT Central Rail Yard Expansion** (Figure 1) is a two-phase, \$40 million rail yard expansion project to be completed over a four year period. The project will expand the Terminal's rail yard to a total capacity of 37,000 track feet through construction of an additional 24,000 feet of railroad track, ties and ballast, several switches, heavy-duty pavement in the rail yard area, container handling areas, and associated civil site utility and electrical infrastructure.

These rail improvements will revolutionize Port rail operations, by eliminating less efficient hustlers and rubber-tired gantry cranes and converting to shuttle carriers and top picks. This will significantly increase the velocity of rail operations and achieve efficiencies similar to those realized when the Port implemented straddle carriers for handling vessel operations. The shuttle carrier/top pick operation allows each piece of equipment to operate decoupled and at maximum efficiency without the need to wait for another piece of equipment to hand off the containers.

The project will enable the NIT to increase the annual volume of containers moved by rail from 250,000 TEUs to 500,000 TEUs. This will facilitate the movement of larger volumes of cargo by rail instead of trucks, thus decreasing congestion on local and state highways. The project will also decrease train at-grade rail crossings at Hampton/ Terminal Blvd, increase "within fenceline" security of containers, decrease noise levels for local area residents (Figure 2), and increase the Port's competitiveness while supporting several VTrans2025 and Virginia State Rail Plan goals.

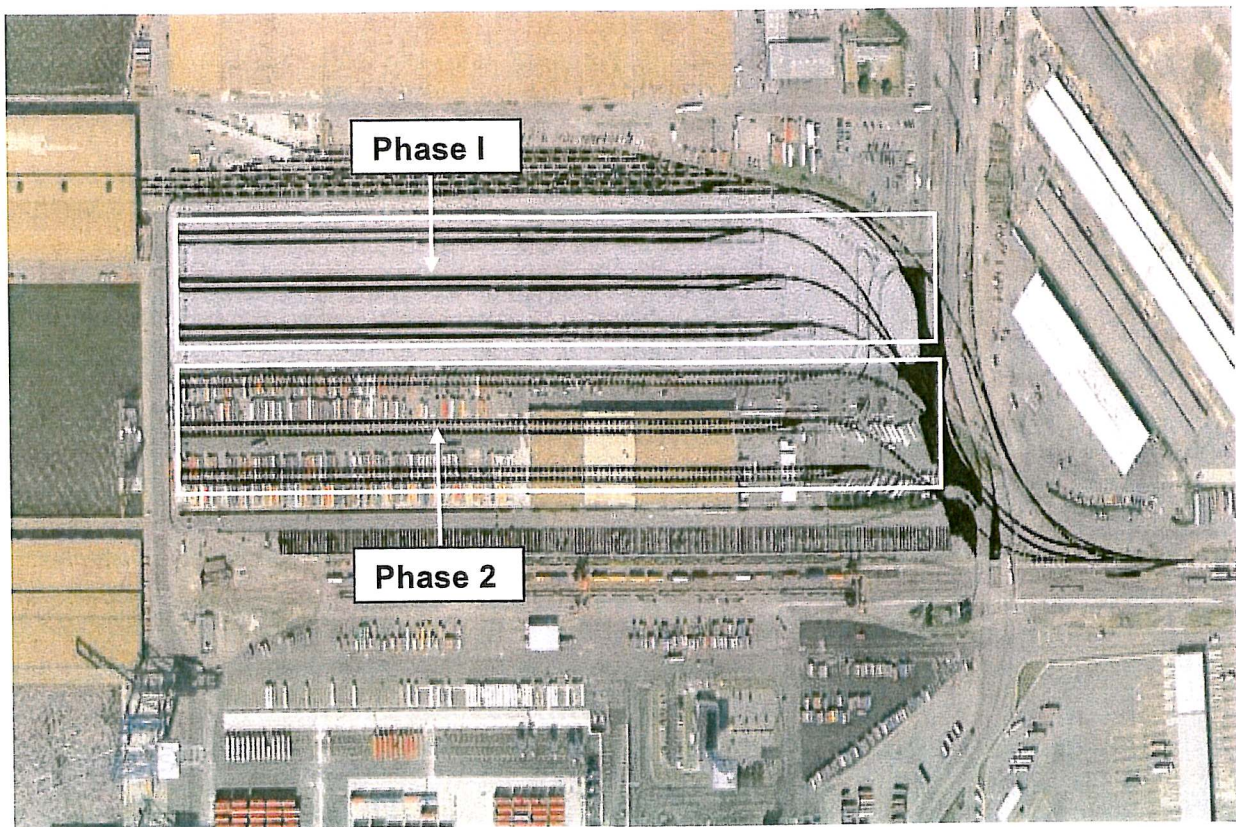


Figure 1: NIT Central Rail Yard Expansion



Figure 2: NIT and Surrounding Norfolk Area

Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

The following additional projects (Figure 3), funded by the Virginia Port Authority (VPA) in large part through Virginia International Terminals (VIT) terminal operations revenue, are related to NIT terminal and rail service expansion, and have been, or are nearing, completion:

1. **NIT South Renovation.** This project entails the complete renovation of NIT South. The entire project area comprises approximately 150 acres and is being completed in stages so as not to interfere with cargo operations. Work began in 2004, and includes renovation of the entire container yard, construction of a 4230 ft wharf, installation of eight Suez-Class cranes, purchase of 70 straddle carriers, as well as utility upgrades and pavement improvements. Approximate construction cost: \$280 million.
2. **NIT North Wharf Extension.** This project includes extension of the existing wharf approximately 900 feet, dredging of the adjacent access channel and berth area, site civil work behind the wharf structure, and associated utility work. The project also includes the procurement of three container cranes similar to those at the south end of the NIT North Wharf. Approximate construction cost: \$57 million.
3. **NIT Shuttle Carrier Road.** This project, which will facilitate movement of containers from the NIT North Wharf to the new Central Rail Yard, includes the construction of approximately 3,000 linear feet of heavy duty shuttle carrier pavement along Bulkhead Avenue from Third Street to Lagoon Avenue. Construction activities include erosion and sediment control, site demolition, earthwork, drainage, water distribution, asphalt pavement, concrete pavement, waterfront structural improvements, rail crossings, site lighting, electrical duct bank, utilities, traffic control, construction phasing, and tie-in with existing waterfront features, drainage lines and rail yard facilities. Approximate construction cost: \$8 million.
4. **Norfolk Portsmouth Belt Line (NPBL) Railroad Acquisition and Repair.** This project (Figure 2) involves the acquisition of 33.5 acres of property, and repair/upgrade of the Norfolk Portsmouth Belt Line freight rail yard, rail infrastructure, and associated railroad track. This project will facilitate a more efficient assembling and movement of train segments on the Norfolk International Terminals (NIT) by adding another 16,632 track feet of rail, including a train segment staging area. The estimated costs are \$5,000,000 for property acquisition (acreage and existing track) and \$3,500,000 for repair/upgrade of existing railroad infrastructure. Rail Enhancement Funds are being sought separately for this project.
5. **Commonwealth Railway Mainline Safety Relocation Project (CRMSRP).** VPA is the lead state agency for this project, which is being partially funded with \$25.8 million in FY 07-09 Rail Enhancement Funds. This \$60 million undertaking will relocate the existing Commonwealth Railway (CWRY) mainline track to the medians of I-664 & the Western Freeway (Route 164), thus eliminating 14 at-grade rail crossings in Portsmouth & Chesapeake. The CRMSRP is part of the \$309 million Heartland Corridor, a multi-state, federally funded rail transportation improvement project of national significance that will improve overall rail access between the Port of Virginia & the markets of the Midwestern United States.

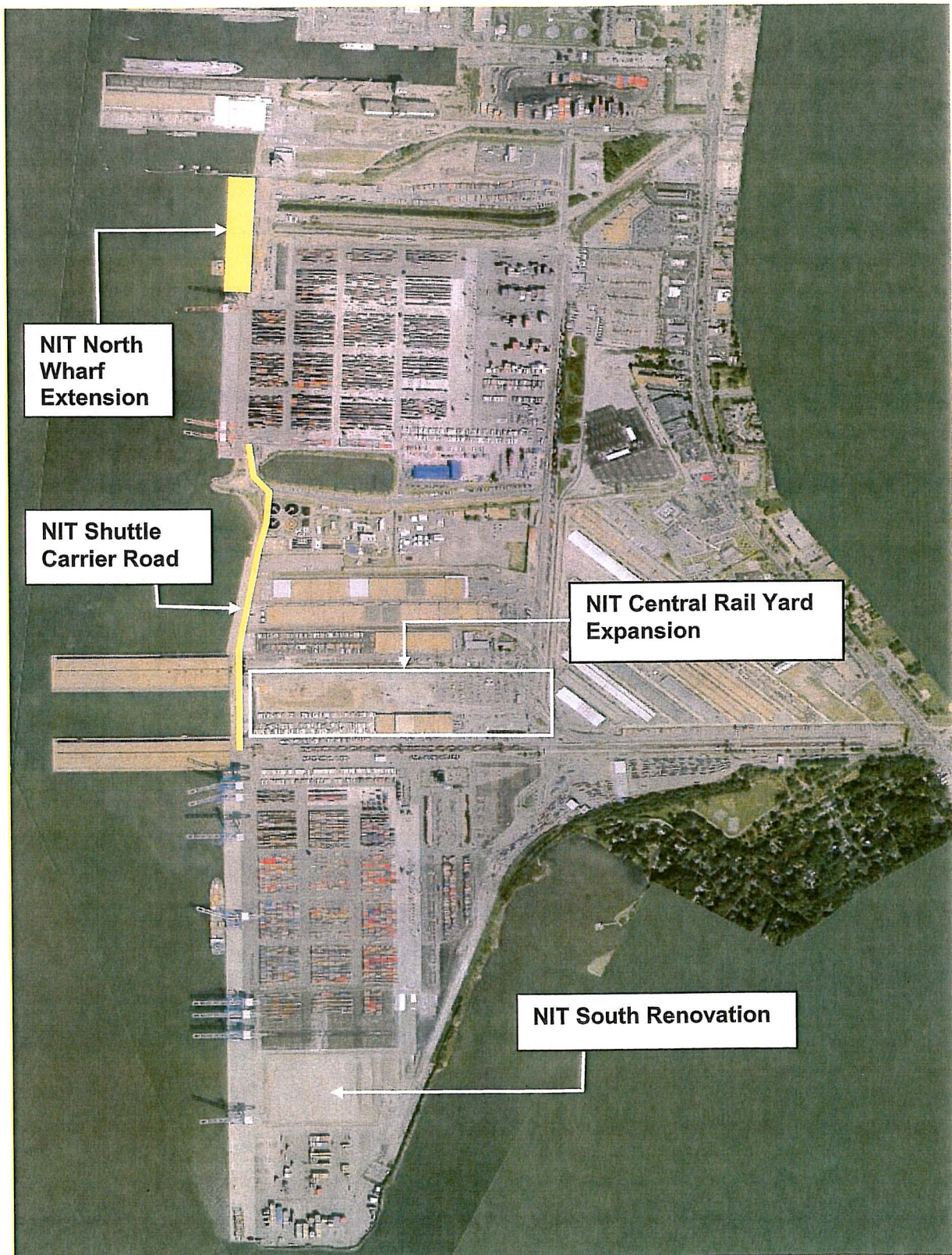


Figure 3: Norfolk International Terminals

Public Benefit of Project

The benefits of the NIT Central Rail Yard Expansion Project include:

- a. Highway congestion relief by reducing the number of container truck movements along the State road network by over 600 trucks per day (a 15% reduction from today's level).
- b. Eliminating over one-half (approximately 10/day) of the movements of trains along the Hampton/Terminal Blvd at grade crossing immediately outside the Terminal (i.e., more on-terminal space will be available for "building/staging" trains).
- c. Improved security of containers through increased "within fenceline" staging of rail cars.
- d. Decreased noise levels by over 30% for residents adjacent to present rail yard (i.e., loading/unloading of trains will be moved from an area immediately adjacent to a large residential area to over ½ mile away).
- e. Enhanced Port competitiveness through improvements to on-terminal container handling efficiency and decreased off-terminal container shipping costs.

This project supports the following VTrans2025 goals:

- a. Provide a safe, secure and integrated transportation system that reflects different needs of the Commonwealth *by decreasing Hampton/Terminal Blvd at-grade crossing movements by over 50%, and moving more containers by rail vice truck (250,000 TEUs/year).*
- b. Facilitate the efficient movement of people and goods and expand choices and improve interconnectivity of all transportation modes *by increasing the efficiency of railcar loading operations and decreasing the number of truck movements along Commonwealth highways (>600/day or 15% reduction from today's levels).*
- c. Improve Virginia's economic vitality and provide access to economic opportunities for all Virginians *by increasing Port competitiveness.*
- d. Improve the quality of life for Virginians and the coordination of transportation, land use and economic development planning activities *by reducing congestion on Commonwealth highways.*

The project also supports the following Virginia State Rail Plan goals:

- a. Promote safety and security *by reducing the frequency of crossings at the Hampton/Terminal Blvd at-grade crossing and providing "within fenceline" staging of trains.*
- b. Improve system capacity, reliability and speed *by facilitating increased container throughput at NIT and mitigating highway congestion.*
- c. Improve intermodalism, connectivity and mobility *by increasing the rail share of intermodal traffic at NIT, and enabling an additional main line rail carrier, CSX, to have access to NIT.*

- d. Improve Virginia's economic competitiveness and quality of life *by reducing the cost of handling containers at NIT, reducing congestion on roads, and reducing air pollution by reducing truck traffic from Port operations by 15% over today's levels.*
- e. Support Virginia DRPT Public-Private partnership efforts and program delivery *by ensuring the project provides an excellent return on investment in terms of enhance productivity, air quality improvement and reduced congestion.*

Type of Project: Rail Facility & Infrastructure

Application Scope of Work Covers: Entire Project

Project Budget Summary:

Feasibility Study	Complete
Environmental Evaluation	Complete
Right of Way Acquisition	N/A
Design Engineering (Phase 1)	\$746,000
Construction (Phase 1)	\$17,500,000
Design Engineering (Phase 2)	\$700,000
Construction (Phase 2)	\$14,000,000
Construction Management	Included above
Public Involvement (if applicable)	N/A
Other	N/A
Lease/Acquisition of Equipment	\$7,200,000

Total Project Budget (Phase 1 & 2)	\$40,146,000
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Fiscal Year	Project Design/Construction Costs	Rail Enhancement Funds
2007	\$ 746,000	\$ 0
2008	\$ 17,500,000	\$ 0
2009	4,300,000	\$ 700,000 (Phase 2 Design)
2010	\$ 14,000,000	\$ 14,000,000 (Phase 2 Construction)
2011	\$ 3,600,000	\$ 0

Local Match Required by Applicant:

The Virginia Port Authority (VPA) will provide a 63.4% match for this project through terminal revenue funds from Virginia International Terminals (VIT) operations (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia). VPA will fund Phase 1 Design and Construction, as well as Equipment Lease/Acquisition. Requested Rail Enhancement Funds (36.6%) are for Phase 2 Design and Construction.

Project Implementation Schedule (based in months). List major milestones of the project.

Phase 1 Design:	Complete (April 2007)
Phase 1 Construction Award:	July, 2007
Phase 1 Construction Completion:	September, 2008
Phase 2 Design Award:	December, 2008
Phase 2 Design Completion:	July, 2009
Phase 2 Construction Award:	August, 2009
Phase 2 Construction Completion:	October, 2010

Statement of how this project promotes or does not preclude dual/multi-access use.

All rail lines will have access to the NIT Central Rail Yard, although the main line to NIT is owned by Norfolk Southern. Other rail lines have to pay a switching fee to Norfolk Southern in order to use the main line. CSX recently obtained double stack clearance to Atlanta, and has requested to access NIT via Norfolk Southern. However, as previously noted, the current NIT rail yard is at maximum capacity. Thus, without this project, CSX may continue to be precluded from accessing NIT.

List additional users of rail line, facility, and/or equipment.

Norfolk Southern Railroad

Identify possible environmental issues/concerns within the scope of this project.

The State environmental impact report for the project was completed in April, 2007. Per the report, the project will have minimal, if any, long term negative effects on the natural and physical resources at NIT. There will be no permanent negative impact on air or water quality, and the project will not consume any significant areas of land, water, or aquatic habitats.

Required Attachments:

1. Attachment A – Project Data Information Form (Provided)
2. Attachment B – Application Checklist (Provided)
3. Detailed cost, budget, and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D)
4. Certification of Match/% of Match/Documentation of Source of Match, Including Defined Match Source (Provided by Applicant)
5. Certification of Additive Investment (Provided by Applicant)
6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project
7. Statement from the owner of the facility that acknowledges the Commonwealth will have a public interest in private facilities impacted by this project (Provided by Applicant)

Application and Attachment Certification

To the best of my knowledge, all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure, except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

Kevin P. Alt, P.E.
DEPUTY CHIEF ENGINEER

Date: 1-31-08

Attachment A

Form A1 – Project Cost and Construction Period

First Construction Year: FY 2007

Last Construction Year: FY 2011

Fiscal Year	Total Project COST	Total DRPT COST
2007	\$ 746,000	0
2008	\$17,500,000	0
2009	\$ 4,300,000	\$ 700,000
2010	\$14,000,000	\$ 14,000,000
2011	\$ 3,600,000	0
Total	\$ 40,146,000	\$ 14,700,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A2 – Freight Service

Demand	CATEGORY	UNITS	VALUE
	Steady State Demand – diversion of freight to rail from trucks: 250K TEU (20-ft equivalent-length units) / 4 20-foot units (containers) / railcar	Carloads/Year	62,500
	First Year of Diversion (62,500 / 4 years)	Carloads/Year	15,625
	Number of Years until steady state	Years	4

Project Impact on	CATEGORY	UNITS	VALUE
	Rail Miles in Virginia (existing routing before project): 13,000 ft/ 5280 ft/mile	Miles	2.46
	Rail Miles in Virginia (routing after project completion): 37,000 ft/ 5280 ft/mile	Miles	7.01
	Number of Years until steady state	Years	4

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train (6000 feet per train/60 feet per railcar)	Railcars/Train	100
	Rail Tons per Railcar (maximum payload for 20-ft container)	Tons/Railcar	23.76
	Trucks per Railcar (TEUs)	Trucks (TEUs)/Railcar	4

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Train	Not Applicable
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	Not Applicable

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A5 – Demand Characteristics for 15-Year Performance Period

Performance Year	Performance Value * (Containers/Year)
1	62,500
2	125,000
3	187,500
4	250,000
5	250,000
6	250,000
7	250,000
8	250,000
9	250,000
10	250,000
14	250,000
12	250,000
13	250,000
14	250,000
15	250,000
Total	3,375,000

* For Freight Service Projects – Car Loads or Containers per Year

**Rail Enhancement Fund
Project Application Checklist
Attachment B**

Date: January 31, 2008

Name of Applicant and Project:

Virginia Port Authority

Expand Norfolk International Terminals Central Rail Yard

Checklist for Application

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ Yes ☐ No

2. Project is an Additive Investment to Virginia.

☒ Yes ☐ No

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ Yes ☐ No

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ Yes ☐ No

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ Yes ☐ No

6. Application is complete, including signature and specified number of copies provided, and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ Yes ☐ No

**Norfolk International Terminal
Central Rail Yard Expansion**

Detailed Project Budget Summary

Scope of Work	Amount	
Design Engineering (Phase 1)	\$746,000	
Construction (Phase 1)/Construct Mgmt	\$17,500,000	
Design Engineering (Phase 2)	\$700,000	
Construction (Phase 2)/Construct Mgmt	\$14,000,000	
Lease/Acquisition of Equipment (Phases 1 & 2)	<u>\$7,200,000</u>	
Total Project Budget (Phases 1 & 2)	\$40,146,000	
Funding Cost share	Amount	
DRPT Participation (36.6%)	\$14,700,000	
VPA Local Match (63.4%)	\$25,446,000	
Fiscal Year	Project Costs	Rail Enhancement Funds (DRPT)
2007	\$ 746,000	\$ 0
2008	\$ 17,500,000	\$ 0
2009	\$ 4,300,000	\$ 700,000 (Phase 2 Design)
2010	\$ 14,000,000	\$ 14,000,000 (Phase 2 Construction)
2011	<u>\$ 3,600,000</u>	<u>\$ 0</u>
Totals	\$ 40,146,000	\$ 14,700,000

**Norfolk International Terminal
Central Rail Yard Expansion**

Detailed Project Schedule

<u>Scope of Work</u>	<u>Milestone Date</u>
Phase 1 Design	Completed (April, 2007)
Phase 1 Construction Award	July, 2007
Phase 1 Construction Completion	September, 2008
Phase 2 Design Award	December, 2008
Phase 2 Design Completion	July, 2009
Phase 2 Construction Award	August, 2009
Phase 2 Construction Completion	October, 2010

Certification of Match

The Virginia Port Authority (VPA) has applied to the Commonwealth of Virginia for Department of Rail and Public Transportation Rail Enhancement Funds in the amount of \$14,700,000 to assist in funding the project to expand the Norfolk International Terminals Central Rail Yard. The percentage of Rail Enhancement Funding requested is 36.6% of the total estimated project cost.

The total estimated cost for the project is \$40,146,000. As an attachment to the funding application, this document certifies that VPA will provide a 63.4% funding match in the amount of \$25,446,000 from revenue generated from Virginia International Terminals (VIT) terminal operations (as opposed to Commonwealth Port Funds provided by the Commonwealth of Virginia), which constitutes the remaining balance of the estimated cost.



Jeff Florin
Virginia Port Authority
Chief Engineer

Certification of Additive Investment

This certifies that the Commonwealth of Virginia Rail Enhancement Funds requested in this application will add significant capital improvements to the state's rail infrastructure, and result in public benefits to the Commonwealth that are greater than the actual amount of public funds invested.



Jeff Florin
Chief Engineer
Virginia Port Authority

Statement from the Applicant

SWAM Participation Goals to be Achieved by the Project

This is to certify that the Virginia Port Authority will work to achieve the Small, Women-owned, and Minority-owned (SWaM) participation goals in the project for which these Rail Enhancement Funds are requested, as directed by Executive Order 33 (2006) from the Governor of the Commonwealth of Virginia.

A handwritten signature in blue ink, appearing to read "Jeff Florin" followed by a stylized flourish.

Jeff Florin
Chief Engineer
Virginia Port Authority

Statement from the Applicant
Acknowledgement of Commonwealth Public Interest

This statement from the Virginia Port Authority acknowledges that the Commonwealth of Virginia will have a public interest in the facilities, materials, equipment, and improvements funded or impacted by this project.

Jeff Florin
Chief Engineer
Virginia Port Authority